

REMARKS

Applicant respectfully requests further examination and reconsideration in view of the following remarks. Claims 1, 2, 4-12, 14-22 and 24-30 remain pending in the case. Claims 1-30 are rejected. Claims 3, 13, and 23 are cancelled herein without prejudice. Claims 1, 2, 6, 8-12, 16, 18-22, 26 and 28-30 are amended herein. No new matter has been added.

35 U.S.C. §102(e)

Claims 1-30 are rejected under 35 U.S.C. § 102(e) as being anticipated by United States Patent 6,205,146 by Rochberger, et al., hereinafter the "Rochberger" reference. Applicant has reviewed the cited reference and respectfully submit that the embodiments of the present invention as recited in Claims 1-30 are not anticipated by Rochberger.

Independent Claim 1 recites (emphasis added):

A method for managing an Address Resolution Protocol (ARP) message received at a bridging device, said bridging device for bridging a subnet, said method comprising:
 receiving a first message comprised within an ARP frame,
said first message comprising a first contact information for a remote electronic device and a first distance vector representing a first number of hops said first message has traversed;
 comparing said first distance vector to a stored second distance vector corresponding to a stored second contact information for said remote electronic device, said second contact information and said second distance vector provided by a second message comprised within an ARP frame, said second distance vector representing a second number of hops said second message has traversed; and
 storing a message based on results of said comparing.

Independent Claims 11 and 21 recite similar limitations. Claims 2 and 4-10 that depend from independent Claim 1, Claims 12 and 14-20 that depend from independent Claim 11, and Claims 22 and 24-30 that depend from independent Claim 21 provide further recitations of the limitations of the present invention as claimed.

Applicant understands Rochberger to teach a method of dynamic routing to a well known address in an Asynchronous Transfer Mode (ATM) network (Abstract). Rochberger does not teach, show or suggest a method for managing an Address Resolution Protocol (ARP) message received at a bridging device, as claimed. Specifically, Applicant respectfully submits that Rochberger teaches the use of Interim Local Management Interface (ILMI) messages for indicating a hop count of an ATM network (col. 5, lines 38-44). Applicant respectfully asserts that an ILMI message transmitted over an ATM network is not an ARP message as claimed. Moreover, Applicant understands that the ILMI message is transmitted periodically, and is transmitted independently of other messages. In other words, the ILMI message is not included within another message or packet, but rather is transmitted separately.

With reference to the specification of Rochberger, the Examiner cites a LANE Server (LES) that provides address registration and address resolution

as teaching Address Resolution Protocol (ARP) messages. Applicant respectfully asserts that Rochberger is silent as to the use of any particular protocol for address registration and address resolution of a LAN. Moreover, Applicant respectfully asserts that the specification of Rochberger describes ATM network communications, and does not teach, describe or suggest the use of ARP, as claimed.

In contrast, the claimed invention is directed to “[a] method for managing an Address Resolution Protocol (ARP) message received at a bridging device” including “receiving a first message comprised within an ARP frame” and “comparing said first distance vector to a stored second distance vector ... provided by a second message comprised within an ARP frame” (emphasis added). As described in the present specification, a distance vector segment is included in an ARP frame (page 11, lines 9-22).

Moreover, Applicant respectfully asserts that Rochberger does not teach, describe or suggest transmitting distance vectors in “pad bytes”, as recited in Claims 6, 16 and 26 of the claimed invention. As described in the present invention, pad bytes are unused bytes of an ARP frame (page 11, lines 14-22). Applicant respectfully asserts that ATM as used in Rochberger does not provide pad bytes in ATM cells. In contrast, ATM cells are forty-eight bytes long, of which five bytes are the header (col. 1, lines 42-55). Applicant respectfully asserts that ATM cells do not include pad bytes, but rather use all bytes of the cell for

transmitting data. Moreover, Applicant respectfully asserts that ATM does not support the use of pad bytes, as all bytes of the cell are used.

Furthermore, Applicant respectfully asserts that Rochberger does not teach, describe or suggest a distance vector including “a checksum” or “an identifier” as recited in Claims 8, 18 and 28. Examiner cites to col. 5, lines 52-69 of Rochberger as teaching these elements. However, Applicant is unable to locate a reference either of these elements, either generally or specifically. Applicant understands the cited portion to describe a routing method including sending, receiving, registering, incrementing, and forwarding an indication message including a hop count. Applicant respectfully requests that the Examiner specifically point out which of these steps correspond to the claimed elements of “a checksum” and an “identifier.” Since neither of the terms “a checksum” or “identifier” are expressly recited in Rochberger, Applicant respectfully asserts that Claims 8, 18 and 28 overcome the reference under 35 U.S.C. § 102(e). Moreover, as described above, Applicant understands the messages of Rochberger to be transmitted independently. Therefore, it would not be necessary to provide an indication that the message includes a distance vector or a means for verifying the message.

Moreover, with respect to Claims 9, 19 and 29, Applicant is unable to locate a reference in Rochberger to “Ethernet ARP” as claimed. Also, with respect to Claims 10, 20 and 30, Applicant is unable to locate a reference in

Rochberger to “802.1q” as claimed. Since neither of the terms “Ethernet ARP” or “802.1q” are expressly recited in Rochberger, Applicant respectfully asserts that Claims 9, 10, 19, 20, 29 and 30 overcome the reference under 35 U.S.C. § 102(e).

Applicant respectfully asserts that nowhere does Rochberger teach, disclose or suggest “[a] method for managing an Address Resolution Protocol (ARP) message received at a bridging device” including “receiving a first message comprised within an ARP frame” and “comparing said first distance vector to a stored second distance vector ... provided by a second message comprised within an ARP frame” (emphasis added) as recited in independent Claim 1 and the similar recitations of independent Claims 11 and 21, that these claims overcome the Examiner’s basis for rejection under 35 U.S.C. § 102(e), and are thus in a condition for allowance. Therefore, Applicant respectfully submits that Rochberger also does not show or suggest the additional claimed features of the present invention as recited in Claims 2 and 4-10 that depend from independent Claim 1, Claims 12 and 14-20 that depend from independent Claim 11, and Claims 22 and 24-30 that depend from independent Claim 21. Therefore, Applicant respectfully submits that Claims 2, 4-10, 12, 14-20, 22 and 24-30 overcome the Examiner’s basis for rejection under 35 U.S.C. § 102(e) as these claims are dependent on an allowable base claim.

CONCLUSION

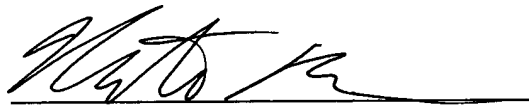
Based on the arguments presented above, Applicant respectfully asserts that Claims 1, 2, 4-12, 14-22, and 24-30 overcome the rejections of record and, therefore, Applicant respectfully solicits allowance of these Claims.

The Examiner is invited to contact Applicant's undersigned representative if the Examiner believes such action would expedite resolution of the present Application.

Please charge our deposit account No. 23-0085 for any unpaid fees.

Respectfully submitted,
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